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AMENDMENTS TO THE CLAIMS

Favorable reconsideration of this application, in light of the preceding amendments and following remarks, is respectfully requested.

Listing of Claims

- 1. (Previously presented) A method comprising:
- a) placing a plurality of labeled proteins, polypeptides or peptides in a plurality of chambers, such that different chambers contain a different type of labeled amino acid;
- b) passing the labeled proteins, polypeptides or peptides through one or more nanopores, an inner surface of the nanopores coated with a semiconductor material;
- c) detecting labeled amino acid residues in the labeled proteins, polypeptides or peptides;
- d) compiling an amino acid distance map for each type of labeled amino acid; and
 - e) identifying the protein based on the distance maps.
 - 2. (Currently amended) The method of claim 1, further comprising:
 - a) placing a template nucleic acid into each chamber; and
- b) producing the one or more labeled proteins, polypeptides or peptides encoded by the template nucleic acid.